

REMARKS

The drawing problem noted by the Examiner is corrected by providing a description of reference numeral 15 in the specification.

The claim objections noted by the Examiner have been corrected by the corresponding amendments herein.

The Examiner indicated claim 25 as being allowed.

The Examiner indicated that claims 11, 13, 17, 20, and 22 would be allowable if rewritten in independent form. This has been done. These claims are thus now allowed.

The Examiner rejected claims 1, 3-5, 18, 21 and 23 under 35 U.S.C. §102 as anticipated by Morgan. Claim 24 was rejected under 35 U.S.C. §103 as unpatentable over Morgan. Claims 2, 10, and 19 were rejected under 35 U.S.C. §103 as unpatentable over Morgan in view of Drozhin. Claims, 6-9, 12, and 14-16 were rejected under 35 U.S.C. §103 as unpatentable over Rosa in view of Morgan.

Claim 1 distinguishes over Morgan at least by reciting applying a chromium layer to a rotogravure print block as an engraving surface, and by use of a laser beam, engraving rotogravure cups in the chromium layer engraving surface where differing volumes of the engraved cups determine differing corresponding tone values. As pointed out in Applicant's specification at page 2, line 6, the volumes of the rotogravure cups determine the tone values, as is very well known for rotogravure engraving. The different sizes of the spots on the print medium created by the different ink amounts creates the different tone values (rotogravure half-tone printing).

The laser engraved cylinder in Figure 1 of Morgan is not a rotogravure cylinder where differing volumes of the engraved cups determines differing

corresponding tone values. To the contrary, exactly the opposite is true, since in Morgan each of the wells 8 has the same volume so that the same amount of ink is provided in each and every one of the wells. Thus, Figure 2 of Morgan has no relevance to claim 1 since it is not a rotogravure print block. This is a so-called analox roll described at column 2 beginning at line 35, which are liquid transfer rolls which transfer uniform liquid volume over the entire working surface of the roll.

Rotogravure cylinders are also described in the background portion of the specification in Morgan where a rotogravure roll is produced by engraving various sizes of wells (column 1, line 54). These gravure rolls are described at column 2, line 9 as being of metal with an outer layer of copper. After completion of the engraving in the copper surface, the copper surface is usually plated with chrome (column 2, line 16). This teaches directly away from the invention since in claim 1 a chromium layer is applied, and by use of a laser beam rotogravure cups are then engraved in the chromium layer engraving surface. Thus, claim 1 distinguishes over the background portion of the Morgan reference and also distinguishes over the Fig. 2/Fig. 4 disclosures of Morgan.

Dependent claims 2-5 distinguish at least for the reasons claim 1 distinguishes and by reciting additional features not suggested in combination.

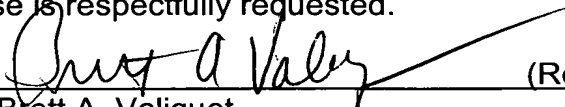
Claim 6 was rejected by the Examiner under 35 U.S.C. §103 as unpatentable over Rosa in view of Morgan. Claim 6 distinguishes over Morgan in the manner described above for claim 1. As to Rosa, this patent shows in Fig. 2 a gravure roller 2 having a steel core 21, a copper layer 22, and a protective chromium plating 23 on layer 22. This merely represents the known prior art already described in Applicant's specification where engraving occurs on a copper layer and a protective chromium plating is laid over the copper layer. Claim 6 readily distinguishes over this reference

either alone or in combination Morgan, since nowhere is there described or suggested in such a combination a rotogravure print block where a laser beam engraves rotogravure cups into the engraving layer where differing volumes of the engraved cups determines differing corresponding tone values, and where that engraving layer is the applied chromium containing layer.

Dependent claims 7-10 distinguish at least for the reasons noted with respect to claim 6 and also by reciting additional features.

The Examiner had rejected claim 18 under Morgan. However, claim 18 distinguishes as explained with respect to claim 1, since it recites a rotogravure print block and wherein laser engraved rotogravure cups are engraved in the chromium layer where differing volumes of the engraved cups determines differing corresponding tone values. Morgan has no such rotogravure cups with differing volumes determining differing corresponding tone values in the chromium layer. In Morgan, in his analog roller all the cups have the same volume, and it is therefore not a rotogravure print block.

Allowance of the case is respectfully requested.


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